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Yasuhiko Uchida

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MARTINE PENILLA & GENCARELLA, LLP  
710 LAKEWAY DRIVE  
SUITE 200  
SUNNYVALE, CA 94085

EXAMINER

RILEY, MARCUS T

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/799,010	<b>Applicant(s)</b> UCHIDA ET AL.	
	<b>Examiner</b> Marcus T. Riley	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>attached</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 4-8, 10, 11, 18-20, 22 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 2004/0008363 A1 hereinafter, Suzuki '363) in combination with Mizuki (US 5,623,675 hereinafter, Mizuki '623).

**Regarding claim 1;** Mizuki '675 discloses a print job creation apparatus that creates a print job to print an image, said print job creation apparatus comprising: discloses an information storage module that stores information ("*data storing means for temporarily storing data associated with a first job currently being dealt with...*" column 2, lines 1-2); an interruption process module that, in response to an interruption command received in the middle of creation of a print job, stores the print job in the middle of its creation as a print job under creation into said information storage module and makes ready for creation of a new print job ("*...the interruption control means, in response to the reception of the interruption request, halts the first job currently being dealt with. Then, the interruption function control means stores necessary data associated with the first job currently being dealt with in the data storing means. Then, after the second job associated with the interruption request has been finished, the interruption function control means again reads the data associated with the first job, which data was stored in the data storing means at the time of the receipt of the interruption request. Then, the read*");

Art Unit: 2625

*data is used for carrying out the first job which was dealt before the reception of the interruption request.* " column 2, lines 11-22).

Mizuki '675 does not expressly disclose a resumption process module that, in response to a resumption command to resume interrupted creation of a print job under creation, reads the print job under creation from said information storage module and resumes an original state when the interruption command was received, so as to make ready for continuing creation of the print job under creation.

Suzuki '863 disclose a resumption process module that, in response to a resumption command to resume interrupted creation of a print job under creation, reads the print job under creation from said information storage module and resumes an original state when the interruption command was received, so as to make ready for continuing creation of the print job under creation (*"...there is provided a job processing device which sequentially executes jobs for which processing requests were accepted, the job processing device comprising: first queuing means for sequentially storing jobs for which processing requests were accepted; second queuing means for sequentially storing jobs whose processing is to be interrupted from among the jobs stored in the first queuing means; queue control means which moves the job stored in the first queuing means from the first queuing means to the second queuing means in response to a job processing interruption request and moves the jobs stored in the second queuing means from the second queuing means to the first queuing means in response to a job resumption request; and job execution means for sequentially executing the jobs stored in the first queuing means.*" page 6, paragraph 0059).

Mizuki '675 and Suzuki '863 are combinable because they are from same field of endeavor of network printer systems ("*...object of the present invention is to provide a job scheduling device capable of easily modifying attribute information by reducing a user's burden, a drop in the efficiency of use of a network, and print waiting time even if the attribute information is erroneously specified.*" Suzuki '863 at page 4, paragraph 0059).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675 by adding a resumption process module that, in response to a resumption command to resume interrupted creation of a print job under creation, reads the print job under creation from said information storage module and resumes an original state when the interruption command was received, so as to make ready for continuing creation of the print job under creation as taught by Suzuki '863.

The motivation for doing so would have been to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait ("*...to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait.*" Suzuki '863 at page 4, paragraph 0043).

Therefore, it would have been obvious to combine Mizuki '675 with Suzuki '863 to obtain the invention as specified in claim 1.

**Regarding claim 4;** Mizuki '675 and Suzuki '863 as modified does not expressly disclose a print job creation apparatus where said print job creation apparatus further comprising: a job display module that displays a list of print jobs under creation.

Art Unit: 2625

Suzuki '863 discloses a print job creation apparatus where said print job creation apparatus further comprising: a job display module that displays a list of print jobs under creation (*"The hold queue q2 queues job information of unscheduled job, and the user can edit job information retained in the hold queue q2. The job information retained in this hold queue q2 stays in this queue until the user issues an instruction, and the information is moved to the spool queue q1, the printer queue q5, or the printer queue q6 in response to the user's instruction."* page 30, paragraphs 0423-0424).

Mizuki '675 and Suzuki '863 are combinable with Suzuki '863 because they are from same field of endeavor of network printer systems (*"...object of the present invention is to provide a job scheduling device capable of easily modifying attribute information by reducing a user's burden, a drop in the efficiency of use of a network, and print waiting time even if the attribute information is erroneously specified."* Suzuki '863 at page 4, paragraph 0059).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675 and Suzuki '863 by adding a print job creation apparatus where said print job creation apparatus further comprises: a job display module that displays a list of print jobs under creation as taught by Suzuki '863.

The motivation for doing so would have been to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait (*"...to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait."* Suzuki '863 at page 4, paragraph 0043).

Art Unit: 2625

Therefore, it would have been obvious to combine Mizuki '675 and Suzuki '863 with Suzuki '863 to obtain the invention as specified in claim 1.

**Regarding claim 5;** Suzuki '863 discloses a print job creation apparatus where said job display module displays details of each print job under creation (*"The hold queue q2 queues job information of unscheduled job, and the user can edit job information retained in the hold queue q2. The job information retained in this hold queue q2 stays in this queue until the user issues an instruction, and the information is moved to the spool queue q1, the printer queue q5, or the printer queue q6 in response to the user's instruction."* page 30, paragraphs 0423-0424).

**Regarding claim 6;** Suzuki '863 discloses a print job creation apparatus where said print job creation apparatus further comprising: a comment input module that enters a comment as a piece of information regarding each print job under creation, wherein said job display module displays the comment on the print job under creation (*"The hold queue q2 queues job information of unscheduled job, and the user can edit job information retained in the hold queue q2. The job information retained in this hold queue q2 stays in this queue until the user issues an instruction, and the information is moved to the spool queue q1, the printer queue q5, or the printer queue q6 in response to the user's instruction."* page 30, paragraphs 0423-0424).

**Regarding claim 7;** Suzuki '863 discloses a print job creation where said job display module receives the resumption command (*"The pause queue q4 queues job information of a job which the user instructs to pause, and the job information retained in this pause queue q4 is retained in this queue until the user instructs the resumption of the job. When the user instructs*

*the resumption of the job, the job information is moved to an assigned printer queue.”* page 30, paragraphs 0426).

**Regarding claim 8;** Suzuki ‘863 discloses a print job creation apparatus where said print job creation apparatus further comprising: a job file output module that, in response to an output instruction including specification of a print job under creation, outputs the specified print job under creation as a job file in a predetermined format (*“As shown in FIG. 43, upon receipt of a job output from the terminal 411a or 411b via the network 410 (step S4201), the request control section 412a checks whether or not a job ID, which will be described later, is set to the job (step S4202). If the job ID is set to the job, job information is obtained from this job ID (step S4203), and then it is checked whether or not the accepted document is the final document (step S4204).”* page 30, paragraphs 0435).

**Regarding claim 10;** Suzuki ‘863 a print job creation apparatus where said print job creation apparatus further comprising: a job input module that, in response to a job input instruction including specification of a job file, inputs a print job under creation from the specified job file and stores the input print job under creation into said information storage module (*“The job control elementary section 310 is a processing section which executes command processing in response to an input command, scheduling or queuing corresponding to a job processing request, and the issue of a job processing request to the job execution section 304. This job control elementary section 310 effects the pausing and resumption of job processing. The event processing section 310a processes an event occurred in the job control section 303, and notifies the management section 320 of the event through the management I/O*



Art Unit: 2625

*control section 302a. The logging processing section 310b stores the contents of processing of the event processing section 310a as a history into the log file 306.*" page 26, paragraphs 0366).

**Regarding claim 11;** Suzuki '863 discloses a print job creation apparatus where each print job is created by selecting one print service among multiple print services (*"Subsequently, the job scheduling section 15 selects a printer which is suitable for processing in the job execution section 13..."* page 10, paragraphs 0144).

**Regarding claim 18;** Mizuki '675 discloses a print job management system comprising multiple print job creation apparatuses and a job management apparatus, which are connected via a network, each of said multiple print job creation apparatuses comprising: an information storage module that stores information (*"data storing means for temporarily storing data associated with a first job currently being dealt with..."* column 2, lines 1-2); an interruption process module that, in response to an interruption command received in the middle of creation of a print job, stores the print job in the middle of its creation as a print job under creation into said information storage module and makes ready for creation of a new print job (*"...the interruption control means, in response to the reception of the interruption request, halts the first job currently being dealt with. Then, the interruption function control means stores necessary data associated with the first job currently being dealt with in the data storing means. Then, after the second job associated with the interruption request has been finished, the interruption function control means again reads the data associated with the first job, which data was stored in the data storing means at the time of the receipt of the interruption request. Then, the read data is used for carrying out the first job which was dealt before the reception of the interruption request."* column 2, lines 11-22).

Art Unit: 2625

Mizuki '675 does not expressly disclose 1) a resumption process module that, in response to a resumption command to resume interrupted creation of a print job under creation, reads the print job under creation from said information storage module and resumes an original state when the interruption command was received, so as to make ready for continuing creation of the print job under creation; 2) a transmission process module that, in response to a transmission instruction including transmission destination information and specification of a print job under creation, sends the specified print job under creation as a job file in a predetermined format and the transmission destination information to said job management apparatus; 3) a reception process module that receives a job file sent from said job management apparatus, inputs a print job under creation from the received job file, and stores the input print job under creation into said information storage module, said job management apparatus comprising: an information storage module that stores information; 4) a job file reception module that receives a job file with transmission destination information sent from one of said multiple print job creation apparatuses and stores the received job file in relation to the transmission destination information into said information storage module; and 5) job file transmission module that sends a job file stored in said information storage module to a print job creation apparatus, which is specified as a transmission destination by transmission destination information stored in relation to the job file, at a preset timing.

Suzuki '863 discloses 1) a resumption process module that, in response to a resumption command to resume interrupted creation of a print job under creation, reads the print job under creation from said information storage module and resumes an original state when the interruption command was received, so as to make ready for continuing creation of the print job

Art Unit: 2625

under creation (*"...there is provided a job processing device which sequentially executes jobs for which processing requests were accepted, the job processing device comprising: first queuing means for sequentially storing jobs for which processing requests were accepted; second queuing means for sequentially storing jobs whose processing is to be interrupted from among the jobs stored in the first queuing means; queue control means which moves the job stored in the first queuing means from the first queuing means to the second queuing means in response to a job processing interruption request and moves the jobs stored in the second queuing means from the second queuing means to the first queuing means in response to a job resumption request; and job execution means for sequentially executing the jobs stored in the first queuing means."* page 6, paragraph 0059); 2) a transmission process module that, in response to a transmission instruction including transmission destination information and specification of a print job under creation, sends the specified print job under creation as a job file in a predetermined format and the transmission destination information to said job management apparatus (*"The job scheduling section 312 is a processing section which issues a job execution instruction to the job execution section control section 313 via a transmission processing section 312c, and also executes the queuing of a job using a queue management section 312d."* page 27, paragraph 0370); 3) a reception process module that receives a job file sent from said job management apparatus, inputs a print job under creation from the received job file, and stores the input print job under creation into said information storage module, said job management apparatus comprising: an information storage module that stores information (*"As shown in FIGS. 30b and 30c, the data 280 received by the print processing device is divided into an attribute data item 280a and a document data item 280b. The document data item 280b is*

Art Unit: 2625

*stored in the spool of the job acceptance section 201, whilst the attribute data item 280a is stored in the object file 209 after a file path name of a spool of each document data has been added to it."* page 25, paragraph 0330); 4) a job file reception module that receives a job file with transmission destination information sent from one of said multiple print job creation apparatuses and stores the received job file in relation to the transmission destination information into said information storage module (*"As shown in FIGS. 30b and 30c, the data 280 received by the print processing device is divided into an attribute data item 280a and a document data item 280b. The document data item 280b is stored in the spool of the job acceptance section 201, whilst the attribute data item 280a is stored in the object file 209 after a file path name of a spool of each document data has been added to it."* page 25, paragraph 0330); and 5) a job file transmission module that sends a job file stored in said information storage module to a print job creation apparatus, which is specified as a transmission destination by transmission destination information stored in relation to the job file, at a preset timing (*"The job scheduling section 312 is a processing section which issues a job execution instruction to the job execution section control section 313 via a transmission processing section 312c, and also executes the queuing of a job using a queue management section 312d. It is possible to make such a job request include a pause command and a resumption command. When the pause command is received, a command processing section (hereinafter referred to as a pausing section 312e) for the pause command is activated. On the other hand, when the resumption command is received, a command processing section (hereinafter referred to as a resuming section 312f) for the resumption command is activated."* page 27, paragraph 0370).

Mizuki '675 and Suzuki '863 are combinable because they are from same field of endeavor of network printer systems ("*...object of the present invention is to provide a job scheduling device capable of easily modifying attribute information by reducing a user's burden, a drop in the efficiency of use of a network, and print waiting time even if the attribute information is erroneously specified.*" Suzuki '863 at page 4, paragraph 0059).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675 by adding 1) a resumption process module that, in response to a resumption command to resume interrupted creation of a print job under creation, reads the print job under creation from said information storage module and resumes an original state when the interruption command was received, so as to make ready for continuing creation of the print job under creation; 2) a transmission process module that, in response to a transmission instruction including transmission destination information and specification of a print job under creation, sends the specified print job under creation as a job file in a predetermined format and the transmission destination information to said job management apparatus; 3) a reception process module that receives a job file sent from said job management apparatus, inputs a print job under creation from the received job file, and stores the input print job under creation into said information storage module, said job management apparatus comprising: an information storage module that stores information; 4) a job file reception module that receives a job file with transmission destination information sent from one of said multiple print job creation apparatuses and stores the received job file in relation to the transmission destination information into said information storage module; and 5) job file transmission module that sends a job file stored in said information storage module to a

Art Unit: 2625

print job creation apparatus, which is specified as a transmission destination by transmission destination information stored in relation to the job file, at a preset timing as taught by Suzuki '863.

The motivation for doing so would have been to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait (*"...to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait."* Suzuki '863 at page 4, paragraph 0043).

Therefore, it would have been obvious to combine Mizuki '675 with Suzuki '863 to obtain the invention as specified in claim 18.

**Regarding claim 19;** Mizuki '675 and Suzuki '863 as modified does not expressly disclose a print job management system where the preset timing is an output timing of a transmission request of a job file from any one of said multiple print job creation apparatuses via the network, and said job file transmission module included in said job management apparatus extracts a job file stored in said information storage module in relation to transmission destination information, which specifies said print job creation apparatus of the request sender as the transmission destination, and sends the extracted job file to said print job creation apparatus of the request sender.

Suzuki '863 discloses a print job management system where the preset timing is an output timing of a transmission request of a job file from any one of said multiple print job

Art Unit: 2625

creation apparatuses via the network, and said job file transmission module included in said job management apparatus extracts a job file stored in said information storage module in relation to transmission destination information, which specifies said print job creation apparatus of the request sender as the transmission destination, and sends the extracted job file to said print job creation apparatus of the request sender (*"When received a job request via the request/acknowledgement acceptance section 312a, the job scheduling section 312 executes the processing of a command by activating a command processing section 3012b corresponding to a command included in the job request. The job scheduling section 312 is a processing section which issues a job execution instruction to the job execution section control section 313 via a transmission processing section 312c, and also executes the queuing of a job using a queue management section 312d. It is possible to make such a job request include a pause command and a resumption command. When the pause command is received, a command processing section (hereinafter referred to as a pausing section 312e) for the pause command is activated. On the other hand, when the resumption command is received, a command processing section (hereinafter referred to as a resuming section 312f) for the resumption command is activated. The queue management section 312d manages a printer queue 312g and a pause queue 312h. The printer queue 312g is provided corresponding to a printer so as to queue job information of jobs waiting for printing. A job assigned to each printer is queued in a corresponding printer queue. In other words, the printer queue 312g is provided corresponding to physical printers included in the job execution section 313. A pause queue 312h queues jobs paused according to a user's instruction. Jobs held in the pause queue 312h are retained in this queue until a*

Art Unit: 2625

*resumption instruction is issued by the user. When the user issues the resumption instruction, the job information will be moved to the assigned printer.*" page 27, paragraph 0370-0371).

Mizuki '675 and Suzuki '863 are combinable with Suzuki '863 because they are from same field of endeavor of network printer systems ("*...object of the present invention is to provide a job scheduling device capable of easily modifying attribute information by reducing a user's burden, a drop in the efficiency of use of a network, and print waiting time even if the attribute information is erroneously specified.*" Suzuki '863 at page 4, paragraph 0059).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675 and Suzuki '863 by a print job management system where the preset timing is an output timing of a transmission request of a job file from any one of said multiple print job creation apparatuses via the network, and said job file transmission module included in said job management apparatus extracts a job file stored in said information storage module in relation to transmission destination information, which specifies said print job creation apparatus of the request sender as the transmission destination, and sends the extracted job file to said print job creation apparatus of the request sender as taught by Suzuki '863.

The motivation for doing so would have been to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait ("*...to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait.*" Suzuki '863 at page 4, paragraph 0043).



Therefore, it would have been obvious to combine Mizuki '675 and Suzuki '863 with Suzuki '863 to obtain the invention as specified in claim 18.

**Regarding claim 20;** Suzuki '863 discloses a print job management system where said transmission process module included in each of said print job creation apparatuses receives a comment and sends a job file with the received comment to said job management apparatus (*"When received a job request via the request/acknowledgement acceptance section 312a, the job scheduling section 312 executes the processing of a command by activating a command processing section 3012b corresponding to a command included in the job request. The job scheduling section 312 is a processing section which issues a job execution instruction to the job execution section control section 313 via a transmission processing section 312c, and also executes the queuing of a job using a queue management section 312d. It is possible to make such a job request include a pause command and a resumption command. When the pause command is received, a command processing section (hereinafter referred to as a pausing section 312e) for the pause command is activated. On the other hand, when the resumption command is received, a command processing section (hereinafter referred to as a resuming section 312f) for the resumption command is activated."* page 27, paragraph 0370).

**Regarding claim 22;** Mizuki '675 discloses a job management apparatus that manages transmission of print jobs under creation between multiple print job creation apparatuses via a network, where each of said multiple print job creation apparatuses creates a print job to print an image through multiple steps, said job management apparatus comprising: an information storage module that stores information (*"data storing means for temporarily storing data associated with a first job currently being dealt with..."* column 2, lines 1-2).

Art Unit: 2625

Mizuki '675 does not expressly disclose 1) a job file reception module that receives a job file, which is a file of a print job under creation, with transmission destination information for specifying a print job creation apparatus as a transmission destination from one of said multiple print job creation apparatuses via the network and stores the received job file in relation to the transmission destination information into said information storage module; 2) a job file transmission module that sends a job file stored in said information storage module to a print job creation apparatus, which is specified as a transmission destination by transmission destination information stored in relation to the job file, at a preset timing.

Suzuki '863 discloses 1) a job file reception module that receives a job file, which is a file of a print job under creation, with transmission destination information for specifying a print job creation apparatus as a transmission destination from one of said multiple print job creation apparatuses via the network and stores the received job file in relation to the transmission destination information into said information storage module (*"As shown in FIGS. 30b and 30c, the data 280 received by the print processing device is divided into an attribute data item 280a and a document data item 280b. The document data item 280b is stored in the spool of the job acceptance section 201, whilst the attribute data item 280a is stored in the object file 209 after a file path name of a spool of each document data has been added to it."* page 25, paragraph 0330); 2) a job file transmission module that sends a job file stored in said information storage module to a print job creation apparatus, which is specified as a transmission destination by transmission destination information stored in relation to the job file, at a preset timing (*"The job scheduling section 312 is a processing section which issues a job execution instruction to the job execution section control section 313 via a transmission processing section 312c, and also*

Art Unit: 2625

*executes the queuing of a job using a queue management section 312d. It is possible to make such a job request include a pause command and a resumption command. When the pause command is received, a command processing section (hereinafter referred to as a pausing section 312e) for the pause command is activated. On the other hand, when the resumption command is received, a command processing section (hereinafter referred to as a resuming section 312f) for the resumption command is activated."* page 27, paragraph 0370).

Mizuki '675 and Suzuki '863 are combinable because they are from same field of endeavor of network printer systems ("*...object of the present invention is to provide a job scheduling device capable of easily modifying attribute information by reducing a user's burden, a drop in the efficiency of use of a network, and print waiting time even if the attribute information is erroneously specified.*" Suzuki '863 at page 4, paragraph 0059).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675 by adding 1) a job file reception module that receives a job file, which is a file of a print job under creation, with transmission destination information for specifying a print job creation apparatus as a transmission destination from one of said multiple print job creation apparatuses via the network and stores the received job file in relation to the transmission destination information into said information storage module; 2) a job file transmission module that sends a job file stored in said information storage module to a print job creation apparatus, which is specified as a transmission destination by transmission destination information stored in relation to the job file, at a preset timing as taught by Suzuki '863.

Art Unit: 2625

The motivation for doing so would have been to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait (*"...to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait."* Suzuki '863 at page 4, paragraph 0043).

Therefore, it would have been obvious to combine Mizuki '675 with Suzuki '863 to obtain the invention as specified in claim 22.

**Regarding claim 23;** Mizuki '675 and Suzuki '863 as modified does not expressly disclose a job management apparatus where the preset timing is an output timing of a transmission request of a job file from any one of said multiple print job creation apparatuses via the network, and said job file transmission module extracts a job file stored in said information storage module in relation to transmission destination information, which specifies said print job creation apparatus of the request sender as the transmission destination, and sends the extracted job file to said print job creation apparatus of the request sender.

Suzuki '863 discloses a job management apparatus where the preset timing is an output timing of a transmission request of a job file from any one of said multiple print job creation apparatuses via the network, and said job file transmission module extracts a job file stored in said information storage module in relation to transmission destination information, which specifies said print job creation apparatus of the request sender as the transmission destination, and sends the extracted job file to said print job creation apparatus of the request sender (*"When received a job request via the request/acknowledgement acceptance section 312a, the job*

Art Unit: 2625

*scheduling section 312 executes the processing of a command by activating a command processing section 3012b corresponding to a command included in the job request. The job scheduling section 312 is a processing section which issues a job execution instruction to the job execution section control section 313 via a transmission processing section 312c, and also executes the queuing of a job using a queue management section 312d. It is possible to make such a job request include a pause command and a resumption command. When the pause command is received, a command processing section (hereinafter referred to as a pausing section 312e) for the pause command is activated. On the other hand, when the resumption command is received, a command processing section (hereinafter referred to as a resuming section 312f) for the resumption command is activated."* page 27, paragraph 0370).

Mizuki '675 and Suzuki '863 are combinable with Suzuki '863 because they are from same field of endeavor of network printer systems ("*...object of the present invention is to provide a job scheduling device capable of easily modifying attribute information by reducing a user's burden, a drop in the efficiency of use of a network, and print waiting time even if the attribute information is erroneously specified.*" Suzuki '863 at page 4, paragraph 0059).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675 and Suzuki '863 by adding a job management apparatus where the preset timing is an output timing of a transmission request of a job file from any one of said multiple print job creation apparatuses via the network, and said job file transmission module extracts a job file stored in said information storage module in relation to transmission destination information, which specifies said print job creation

Art Unit: 2625

apparatus of the request sender as the transmission destination, and sends the extracted job file to said print job creation apparatus of the request sender as taught by Suzuki '863.

The motivation for doing so would have been to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait (*"...to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait."* Suzuki '863 at page 4, paragraph 0043).

Therefore, it would have been obvious to combine Mizuki '675 and Suzuki '863 with Suzuki '863 to obtain the invention as specified in claim 22.

3. **Claims 2 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuki '675 and Suzuki '863 as applied to claim 1 above, and further in view of Yokoyama (US 7,126,719 B2 hereinafter, Yokoyama '719).

**Regarding claim 2;** Mizuki '675 and Suzuki '863 as modified does not expressly disclose a print job creation apparatus where each print job is created through multiple steps including an image registration step, a template selection step, and a print instruction step

Yokoyama '719 discloses a print job creation apparatus where each print job is created through multiple steps including an image registration step, a template selection step, and a print instruction step (*"...the fact that the image data has been transmitted to the second and third copiers is registered in a list beforehand. At step S106, abort is reported to the second and third*

Art Unit: 2625

*copiers on the basis of the list. More specifically, the first copier sends the second and third copiers a command indicating that submission of the print job is to be aborted.*" column 7, lines 27-33).

Mizuki '675 and Suzuki '863 are combinable with Yokoyama '719 because they are from same field of endeavor of network printer systems ("*...The present invention relates to a printing job performed by a copier, etc., which executes print processing upon being connected to a network...*" Yokoyama '719 at column 1, lines 7-9).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675 and Suzuki '863 by adding a print job creation apparatus where each print job is created through multiple steps including an image registration step, a template selection step, and a print instruction step as taught by Yokoyama '719.

The motivation for doing so would have been to provide a print processing method having a high operating efficiency ("*...to provide a print processing method having a high operating efficiency...*" Yokoyama '719 at column 1, lines 40-42).

Therefore, it would have been obvious to combine Mizuki '675 and Suzuki '863 with Yokoyama '719 to obtain the invention as specified in claim 1.

**Regarding claim 21;** Yokoyama '719 discloses a print job management system where each of said multiple print job creation apparatuses creates each print job through multiple steps including an image registration step, a template selection step, and a print instruction step, and said transmission process module included in said each print job creation apparatus sends a print

Art Unit: 2625

job under creation at a stage after the template selection step to said job management apparatus (*"...the fact that the image data has been transmitted to the second and third copiers is registered in a list beforehand. At step S106, abort is reported to the second and third copiers on the basis of the list. More specifically, the first copier sends the second and third copiers a command indicating that submission of the print job is to be aborted."* column 7, lines 27-33).

4. **Claims 3 & 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuki '675, Suzuki '863 and Yokoyama '719 as applied to claim 1 above, and further in view of Suzuki '863.

**Regarding claim 3;** Mizuki '675, Suzuki '863 and Yokoyama '719 as modified does not expressly disclose a print job creation apparatus where the multiple steps further include a layout editing step between the template selection step and the print instruction step.

Suzuki '863 discloses a print job creation apparatus where the multiple steps further include a layout editing step between the template selection step and the print instruction step (*"The hold queue q2 queues job information of unscheduled job, and the user can edit job information retained in the hold queue q2. The job information retained in this hold queue q2 stays in this queue until the user issues an instruction, and the information is moved to the spool queue q1, the printer queue q5, or the printer queue q6 in response to the user's instruction."* page 30, paragraphs 0423-0424).

Mizuki '675, Suzuki '863 and Yokoyama '719 are combinable with Suzuki '863 because they are from same field of endeavor of network printer systems (*"...object of the present invention is to provide a job scheduling device capable of easily modifying attribute information*



Art Unit: 2625

*by reducing a user's burden, a drop in the efficiency of use of a network, and print waiting time even if the attribute information is erroneously specified."* Suzuki '863 at page 4, paragraph 0059).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675, Suzuki '863 and Yokoyama '719 by adding a print job creation apparatus where the multiple steps further include a layout editing step between the template selection step and the print instruction step as taught by Suzuki '863.

The motivation for doing so would have been to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait ("*...to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait.*") Suzuki '863 at page 4, paragraph 0043).

Therefore, it would have been obvious to combine Mizuki '675, Suzuki '863 and Yokoyama '719 with Suzuki '863 to obtain the invention as specified in claim 1.

**Regarding claim 9;** Mizuki '675, Suzuki '863 and Yokoyama '719 discloses a print job creation apparatus in accordance with claim 8, wherein each print job is created through multiple steps including an image registration step, a template selection step, and a print instruction step ("*...the fact that the image data has been transmitted to the second and third copiers is registered in a list beforehand. At step S106, abort is reported to the second and third copiers on the basis of the list. More specifically, the first copier sends the second and third copiers a*

Art Unit: 2625

*command indicating that submission of the print job is to be aborted.*" Yokoyama '719 at column 7, lines 27-33).

Mizuki '675, Suzuki '863 and Yokoyama '719 as modified does not expressly disclose a job file output module outputs a print job under creation, which is at a stage after the template selection step, as a job file.

Suzuki '863 discloses a job file output module outputs a print job under creation, which is at a stage after the template selection step, as a job file (*"As shown in FIG. 43, upon receipt of a job output from the terminal 411a or 411b via the network 410 (step S4201), the request control section 412a checks whether or not a job ID, which will be described later, is set to the job (step S4202). If the job ID is set to the job, job information is obtained from this job ID (step S4203), and then it is checked whether or not the accepted document is the final document (step S4204)."* page 30, paragraphs 0435).

Mizuki '675, Suzuki '863 and Yokoyama '719 are combinable with Suzuki '863 because they are from same field of endeavor of network printer systems (*"...object of the present invention is to provide a job scheduling device capable of easily modifying attribute information by reducing a user's burden, a drop in the efficiency of use of a network, and print waiting time even if the attribute information is erroneously specified."* Suzuki '863 at page 4, paragraph 0059).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675, Suzuki '863 and

Art Unit: 2625

Yokoyama '719 by adding a job file output module outputs a print job under creation, which is at a stage after the template selection step, as a job file as taught by Suzuki '863.

The motivation for doing so would have been to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait (*"...to provide a job processing system designed so as to be able to continuously output document processing requests without obstructing job control such as a processing start wait."* Suzuki '863 at page 4, paragraph 0043).

Therefore, it would have been obvious to combine Mizuki '675, Suzuki '863 and Yokoyama '719 with Suzuki '863 to obtain the invention as specified in claim 1.

5. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuki '675 and Suzuki '863 as applied to claim 1 above, and further in view of Shiota et al. (US 6,324,521 B1 hereinafter, Shiota '521).

**Regarding claim 12;** Mizuki '675 and Suzuki '863 does not expressly disclose a print job creation apparatus where the multiple print services include at least one of an enlargement printing service, a digest printing service, a calendar printing service, a postcard printing service, a photo name card printing service, an ID photograph printing service, a seal printing service, a label printing service, and an album printing service.

Shiota '521 discloses a print job creation apparatus where the multiple print services include at least one of an enlargement printing service, a digest printing service, a calendar

Art Unit: 2625

printing service, a postcard printing service, a photo name card printing service, an ID photograph printing service, a seal printing service, a label printing service, and an album printing service ("*...when the printing service requested by the order needs special equipment to provide the service, such as generation of a picture postcard or a creative calendar.*" column 3, lines 8-11).

Mizuki '675 and Suzuki '863 are combinable with Shiota '521 because they are from same field of endeavor of network systems ("*The present invention relates to a network photograph service system which provides a customer with a photograph service via a network...*" Shiota '521 at column 1, lines 7-9).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network systems as taught by Mizuki '675 and Suzuki '863 by adding a print job creation apparatus where the multiple print services include at least one of an enlargement printing service, a digest printing service, a calendar printing service, a postcard printing service, a photo name card printing service, an ID photograph printing service, a seal printing service, a label printing service, and an album printing service as taught by Shiota '521.

The motivation for doing so would have been to provide a network photograph service system which can provide a prompt service to a customer ("*...to provide a network photograph service system which can provide a prompt service to a customer without losing the advantage of a network photograph service system such as easier understanding where to access and collective data management.*" Shiota '521 at column 1, lines 56-61).

Therefore, it would have been obvious to combine Mizuki '675 and Suzuki '863 with Shiota '521 to obtain the invention as specified in claim 1.

Art Unit: 2625

6. **Claims 13-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuki '675, Suzuki '863 and Shiota '521 as applied to claim 1 above, and further in view of Terada '150 (US 7,055,150 B2 hereinafter, Terada '150).

**Regarding claim 13;** Mizuki '675, Suzuki '863 and Shiota '521 does not expressly disclose a print job creation apparatus where said print job creation apparatus further comprising: a duplication process module that, in response to a duplication instruction with specification of a print job under creation, duplicates a registered image corresponding to the specified print job under creation, creates a new print job under creation at a stage of registering the duplicated image, and stores the new print job under creation into said information storage module.

Terada '150 discloses a print job creation apparatus where said print job creation apparatus further comprising: a duplication process module that, in response to a duplication instruction with specification of a print job under creation, duplicates a registered image corresponding to the specified print job under creation, creates a new print job under creation at a stage of registering the duplicated image, and stores the new print job under creation into said information storage module (*"The printer according to the present invention functions printing data onto a print medium, the media can be one of separate form, continuous form or duplication form. Further, as storage 22 for storing the printer firmware, it is possible to use non-volatile storage equipment other than the hard disk, such as a flash memory. In regard to the check data, it is also possible to apply other block data check schemes than the above-mentioned sum check scheme. Moreover, the check data for checking the guarantee range of the received firmware may also be used for the reception completion check."* column 15, lines 11-21).

Art Unit: 2625

Mizuki '675, Suzuki '863 and Shiota '521 are combinable with Terada '150 because they are from same field of endeavor of network printer systems (*"The present invention relates to a printer and a printer system to which firmware is installed in network environment..."* Terada '150 at column 1, lines 8-10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675, Suzuki '863 and Shiota '521 by adding a print job creation apparatus where said print job creation apparatus further comprising: a duplication process module that, in response to a duplication instruction with specification of a print job under creation, duplicates a registered image corresponding to the specified print job under creation, creates a new print job under creation at a stage of registering the duplicated image, and stores the new print job under creation into said information storage module as taught by Terada '150.

The motivation for doing so would have been to provide a printer system and a method for installing a printer firmware automatically even though an operator does not recognize the installation (*"It is another object of the present invention to provide a printer, a printer system and a method for installing a printer firmware automatically even though an operator does not recognize the installation."* Terada '150 at column 2, lines 10-13).

Therefore, it would have been obvious to combine Mizuki '675, Suzuki '863 and Shiota '521 with Terada '150 to obtain the invention as specified in claim 1.

**Regarding claim 14;** Terada '150 discloses a print job creation apparatus where said print job creation apparatus further comprising: an execution process module that, in response to an execution instruction with specification of a created print job, stores the contents of the specified print job as an executed print job into said information storage module, wherein said duplication process module, in response to a duplication instruction with specification of an executed print job, duplicates a registered image corresponding to the specified executed print job, creates a new print job under creation at a stage of registering the duplicated image, and stores the new print job under creation into said information storage module (*"...the printer 4 reports the information on the guarantee range against an inquiry from the installation tool 60, thus a continued installation becomes possible. The printer according to the present invention functions printing data onto a print medium, the media can be one of separate form, continuous form or duplication form. Further, as storage 22 for storing the printer firmware, it is possible to use non-volatile storage equipment other than the hard disk, such as a flash memory. In regard to the check data, it is also possible to apply other block data check schemes than the above-mentioned sum check scheme. Moreover, the check data for checking the guarantee range of the received firmware may also be used for the reception completion check."* column 15, lines 8-21).

**Regarding claim 15;** Terada '150 discloses a print job creation apparatus where said duplication process module creates a new print job under creation with respect to a different print service, which is different from a selected print service in the specified print job under creation or executed print job, and stores the new print job under creation with respect to the different print service into said information storage module (*"The printer according to the present*

Art Unit: 2625

*invention functions printing data onto a print medium, the media can be one of separate form, continuous form or duplication form. Further, as storage 22 for storing the printer firmware, it is possible to use non-volatile storage equipment other than the hard disk, such as a flash memory. In regard to the check data, it is also possible to apply other block data check schemes than the above-mentioned sum check scheme. Moreover, the check data for checking the guarantee range of the received firmware may also be used for the reception completion check.*" column 15, lines 11-21).

7. **Claims 16 & 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuki '675 and Suzuki '863 as applied to claim 1 above, and further in view of Terada '150.

**Regarding claim 16;** Mizuki '675 and Suzuki '863 does not expressly disclose a print job creation apparatus where said print job creation apparatus further comprising: a duplication process module that, in response to a duplication instruction with specification of a print job under creation, duplicates a registered image corresponding to the specified print job under creation, creates a new print job under creation at a stage of registering the duplicated image, and stores the new print job under creation into said information storage module.

Terada '150 discloses a print job creation apparatus where said print job creation apparatus further comprising: a duplication process module that, in response to a duplication instruction with specification of a print job under creation, duplicates a registered image corresponding to the specified print job under creation, creates a new print job under creation at a stage of registering the duplicated image, and stores the new print job under creation into said information storage module ("*...the printer 4 reports the information on the guarantee range against an inquiry from the installation tool 60, thus a continued installation becomes possible.*



Art Unit: 2625

*The printer according to the present invention functions printing data onto a print medium, the media can be one of separate form, continuous form or duplication form. Further, as storage 22 for storing the printer firmware, it is possible to use non-volatile storage equipment other than the hard disk, such as a flash memory. In regard to the check data, it is also possible to apply other block data check schemes than the above-mentioned sum check scheme. Moreover, the check data for checking the guarantee range of the received firmware may also be used for the reception completion check.*" column 15, lines 8-21).

Mizuki '675 and Suzuki '863 are combinable with Terada '150 because they are from same field of endeavor of network printer systems (*"The present invention relates to a printer and a printer system to which firmware is installed in network environment..."* Terada '150 at column 1, lines 8-10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer systems as taught by Mizuki '675 and Suzuki '863 by adding a print job creation apparatus where said print job creation apparatus further comprising: a duplication process module that, in response to a duplication instruction with specification of a print job under creation, duplicates a registered image corresponding to the specified print job under creation, creates a new print job under creation at a stage of registering the duplicated image, and stores the new print job under creation into said information storage module as taught by Terada '150.

The motivation for doing so would have been to provide a printer system and a method for installing a printer firmware automatically even though an operator does not recognize the installation (*"It is another object of the present invention to provide a printer, a printer system*

Art Unit: 2625

*and a method for installing a printer firmware automatically even though an operator does not recognize the installation.*" Terada '150 at column 2, lines 10-13).

Therefore, it would have been obvious to combine Mizuki '675 and Suzuki '863 with Terada '150 to obtain the invention as specified in claim 1.

**Regarding claim 17;** Terada '150 discloses a print job creation apparatus where said print job creation apparatus further comprising: an execution process module that, in response to an execution instruction with specification of a created print job, stores the contents of the specified print job as an executed print job into said information storage module, wherein said duplication process module, in response to a duplication instruction with specification of an executed print job, duplicates a registered image corresponding to the specified executed print job, creates a new print job under creation at a stage of registering the duplicated image, and stores the new print job under creation into said information storage module ("*...the printer 4 reports the information on the guarantee range against an inquiry from the installation tool 60, thus a continued installation becomes possible. The printer according to the present invention functions printing data onto a print medium, the media can be one of separate form, continuous form or duplication form. Further, as storage 22 for storing the printer firmware, it is possible to use non-volatile storage equipment other than the hard disk, such as a flash memory. In regard to the check data, it is also possible to apply other block data check schemes than the above-mentioned sum check scheme. Moreover, the check data for checking the guarantee range of the received firmware may also be used for the reception completion check.*" column 15, lines 8-21).

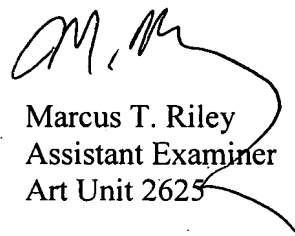
Art Unit: 2625

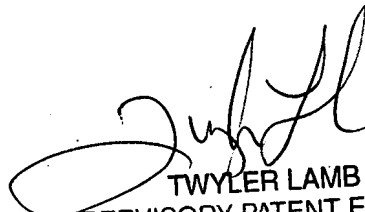
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus T. Riley whose telephone number is 571-270-1581. The examiner can normally be reached on Monday - Friday, 7:30-5:00, est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Marcus T. Riley  
Assistant Examiner  
Art Unit 2625

  
TWYLER LAMB  
SUPERVISORY PATENT EXAMINER